

**OAK GROVE GARDEN TOWNHOMES PROJECT
FINAL BIOTIC ASSESSMENT**

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INTRODUCTION

GENERAL PROJECT AREA DESCRIPTION

The Oak Grove Garden Townhomes project site (site) is located at 1566 Duckett Way, in northwestern San Jose, Santa Clara County (Figure 1). The 1.82-acre site is bordered by Calabazas Creek to the southeast, Duckett Way and residential development to the west, and residential development to the north. The site currently supports a single-family home and associated outbuildings and landscaping. Non-native herbaceous vegetation occurs throughout the site, but there are no groomed lawns or gardens. The existing development abuts a mixed riparian forest and provides little to no riparian setback. In general, the site vicinity is characterized by dense urban development.

The site is located on the Cupertino U.S. Geological Survey Quadrangle, at an elevation of approximately 280 feet and is underlain by level clay loams of the Zamora series, which are well-drained, fertile, alluvial floodplain soils. Areas of Santa Clara County underlain by these soils were typically used for row crops or orchards. According to historic aerial photography, the subject site has been used as an orchard and private residence at least since 1968 (Soil Conservation Service 1968).

PROJECT DESCRIPTION

The proposed project involves the construction of 19 townhomes and associated infrastructure. The existing home would be preserved and remodeled. A new garage and driveway would be constructed to improve the existing home. The proposed project includes measures to protect the quality of receiving waters. These measures include standard erosion control Best Management Practices, a storm water filtration unit, and oversized underground pipes to detain storm water on-site thereby maintaining pre-development storm water discharge rates to the existing storm drain system. Storm water will be routed to the existing storm drain system along Duckett Way and no new storm water outfalls will be constructed. In addition, the proposed project incorporates measures to minimize riparian habitat impacts and restore riparian habitat, based on input from the City of San Jose and recommendations from H. T. Harvey & Associates. The project will not result in the loss of riparian vegetation. These measures include positioning the development an average of 30 feet away from the edge of riparian habitat along Calabazas Creek and restoration of riparian habitat on-site.

The riparian habitat restoration goal is to restore approximately 8,332 sq. ft. of coast live oak riparian forest between the new development and the existing riparian corridor. This action will expand the width of the riparian corridor by approximately 30 feet, buffering the negative effects of increased noise and lighting on wildlife and providing additional riparian habitat for riparian associated wildlife. Four existing outbuildings and hardscape cover approximately 50% of the restoration area immediately adjacent to the existing riparian forest. Therefore, the restoration methods will entail removal of all existing buildings and hardscape and rehabilitation of topsoil to support native riparian tree and shrub establishment. In addition, native riparian tree and shrub seedlings will be installed and maintained during a 3-year establishment period.

Figure 1. Vicinity Map

Maintenance will include weed control and irrigation sufficient for seedling establishment. A restoration ecologist will qualitatively monitor the restoration site twice annually during the first three years to provide site management recommendations that help ensure successful riparian habitat establishment.

The plant species composition in the restoration area will be modeled after the existing native riparian plant associations along Calabazas Creek growing at middle to upper creek bank locations. As such, the planting palette will primarily include relatively drought tolerant species such as coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), California buckeye (*Aesculus californica*), blue elderberry (*Sambucus mexicana*), snowberry (*Symphoricarpos albus* var. *laevigatus*), and California rose (*Rosa californica*). The plant propagules for these seedlings will originate from populations within Santa Clara County to provide locally adapted genetic material. After the three-year maintenance period, this suite of drought tolerant species should grow and reproduce at the site without human intervention.

BIOTIC SURVEYS

H. T. Harvey & Associates conducted reconnaissance-level field surveys of the site on February 8 and April 28, 2006. The purpose of these surveys was to describe existing conditions and provide a project-specific impact assessment for the site. Specifically, surveys were conducted to: 1) assess existing biotic habitats, 2) assess the site for its potential to support special-status species and their habitats, and 3) identify sensitive habitats and other resources, including riparian habitat. Survey personnel included a plant ecologist (Lisa Infante, M.S.) and two wildlife ecologists (Dave Johnston, Ph.D. and Mary Orland, Ph.D.). The entire project area was surveyed on foot.

BIOTIC HABITATS

Three biotic habitats occur on site: non-native herbaceous habitat/mature trees, mixed riparian forest, and developed. Non-native herbaceous habitat with scattered mature trees occupies the majority of the site, while mixed riparian forest associated with Calabazas Creek occurs along the eastern border of the site (Table 1 and Figure 2). The developed area associated with the single residence occurs between the non-native herbaceous habitat and the riparian forest.

Table 1. Existing Biotic Habitats and Land Use Types.

Biotic Habitat/Land Use Type	Surface Area (acre)
Non-native Herbaceous Habitat/Mature Trees	1.25
Mixed Riparian Forest	0.34
Developed	0.23
Total	1.82

Non-native Herbaceous Habitat/Mature Trees

Vegetation. Mature fruit and ornamental trees, as well as several native oaks, form an intermittent canopy over non-native herbaceous vegetation and garden plantings on the majority of the site. Walnut (*Juglans* spp.) and citrus (*Citrus* spp.) trees occur in the central portion of the site, and rows of large deodar cedar (*Cedrus deodara*) line the western and northern site boundaries. Large-diameter valley oak and coast live oak trees are clustered in the southeast portion of the site. Other large trees on site include coast redwood (*Sequoia sempervirens*), silver wattle (*Acacia dealbata*), and ornamental pine (*Pinus* sp.). Understory species within these areas are primarily introduced exotics which are adapted to frequent disturbance, including Bermuda buttercup (*Oxalis pes-caprae*), dovefoot geranium (*Geranium molle*), filaree (*Erodium* sp.), and ripgut brome (*Bromus diandrus*).

Wildlife. The ornamental trees, orchard, and non-native herbaceous habitat on-site provide both foraging and breeding habitat for those species of wildlife best adapted to suburban environments. This habitat is likely too dry for most amphibians except where a specific area is irrigated regularly, in which case the California slender salamander (*Batrachoseps attenuatus*) is expected to occur under ornamental fixtures and various debris. Feral and free-roaming house cats (*Felis catus*) are present on the site, and both are known predators of other smaller

Figure 2. Biotic and Regulated Habitats

vertebrates, such as lizards, small mammals, and birds. Otherwise commonly occurring lizards, such as the western fence lizard (*Sceloporus occidentalis*) and southern alligator lizard (*Elgaria multicarinatus*) are not expected to occur, or occur on-site in only very low numbers, with the current population of house cats. Likewise, birds, such as the California Towhee (*Pipilo crissalis*) and California Thrasher (*Toxostoma redivivum*) that forage on, and nest near, the ground are expected to occur in only low numbers, if at all, because of the high density of house cats. Other birds such as the American Robin (*Turdus migratorius*), Brewer's Blackbird (*Euphagus cyanocephalus*), House Finch (*Carpodacus mexicanus*), Bushtit (*Psaltiriparus minimus*), Chestnut-backed Chickadee (*Poecile rufescens*), and Nuttall's Woodpecker (*Picoides nuttallii*) possibly breed in the trees in this habitat. Common, urban-adapted mammals such as the raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*) and non-native opossum (*Didelphis virginiana*), likely occur here as well.

Mixed Riparian Forest

Vegetation. The eastern portion of the site abuts Calabazas Creek, a tributary to Guadalupe Slough and the San Francisco Bay. This reach of the creek continues to support relatively undisturbed, closed-canopy, mixed riparian forest. Mature California sycamore (*Platanus racemosa*), California bay (*Umbellularia californica*), valley oak, coast live oak and California buckeye are the dominant trees here. Non-native species, including blue gum (*Eucalyptus globulus*) and ornamental pine, are scattered along the edge of the riparian corridor. Due to its proximity to developed areas, the riparian understory is degraded by the presence of dense mats of non-native English ivy (*Hedera helix*), which compete with native California bay and buckeye seedlings, blue elderberry, and California blackberry (*Rubus ursinus*). In addition, a portion of the riparian habitat on site was recently thinned.

Aquatic habitat associated with Calabazas Creek occurs adjacent to the site, outside of the site boundary.

Wildlife. The well-stratified mixed riparian forest provides habitat for a variety of wildlife species. However, due to the influence of the surrounding suburban and degraded habitats, only the most common species of wildlife regularly occur in this habitat. Native amphibians are likely limited to the Pacific tree frog (*Hyla regilla*) and California slender salamander. Reptiles are likely scarce, if they occur at all, because of the house cat population in all on-site habitats. The coast live oaks and sycamores in this habitat may provide nesting sites for the Cooper's Hawk (*Accipiter cooperii*), as well as many of the species described above. Additionally, the Pacific-slope Flycatcher (*Empidonax difficilis*) may also breed in this habitat. Other species of birds, such as the California Yellow Warbler (*Dendroica petechia brewsteri*), Bullock's Oriole (*Icterus bullockii*), Ruby-crowned Kinglet (*Regulus calendula*), Yellow-rumped Warbler (*Dendroica coronata*), Black-headed Grosbeak (*Pheucticus melanocephalus*), and Hermit Thrush (*Catharus guttatus*), are expected to occur only as visitors during migration and/or winter. Mammals expected to occur in riparian habitat on the site include many of the same mammals as those found in the non-native herbaceous/mature tree habitat.

Developed

Vegetation. Developed areas, including a single family home, paved driveway, and a garden shed and greenhouse, are barren of vegetation.

Wildlife. Buildings often form man-made habitats that mimic caves, cliffs, and in many cases, rocky crevices found in more natural situations. Such crevices found on the sides of buildings (e.g., between a fireplace and wooden siding) and overhanging eaves provide protection from inclement weather as well as from potential predators. Cliff Swallows (*Petrochelidon pyrrhonota*) are sometimes found nesting under the eaves of structures. Bats that commonly roost in buildings include the Mexican free-tailed bat (*Tadarida brasiliensis*), pallid bat (*Antrozous pallidus*), big brown bat (*Eptesicus fuscus*), and the Yuma myotis (*Myotis yumanensis*). However, no evidence was observed of any of these species occurring on the structures. Many of the aforementioned birds and mammals that commonly occur in suburban situations will occasionally visit the developed areas of the site.

SPECIAL-STATUS PLANT AND WILDLIFE SPECIES

An overview of special-status species regulations is provided in Appendix A. The potential for the site to support special-status plant and wildlife species is discussed below.

Special-status Plant Species

A reconnaissance-level survey for special-status plants was conducted on February 8, 2006 by botanist Lisa Infante. Prior to the survey, a query of the CNDDDB was performed to identify special-status plants potentially occurring in the project vicinity (CNDDDB 2005) (Figure 3). Habitats specified in the query included riparian forest and woodland and non-native annual grassland. These California Native Plant Society (CNPS)-designated habitat types were chosen due to the similarity of their constituent species to those on the site. In addition, the CNPS Electronic Inventory (available at <http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi>) was used to identify and assess additional species occurring in similar habitats throughout Santa Clara County.

Twenty-nine special-status plant species were identified in these queries as occurring in Santa Clara County grassland and riparian habitats. Following an analysis of the microhabitat conditions associated with these species, and the edaphic factors that favor their occurrence, all twenty-nine species were considered absent from the site (Appendix B). The majority of the species were rejected for occurrence based on one or more of the following reasons:

1. The species is narrowly associated with an uncommon soil type, such as serpentine or strongly alkaline clay soil, which does not occur on the site;
2. The species occurs in vernal pools or other seasonally wet depressions within grassland, which are absent from site;

Figure 3. CNDDDB Map

3. The species has a very limited range of endemism, such as the eastern slopes of Mount Diablo, and has never been observed in the vicinity of the site;
4. Common plants which are nearly always associated with the special-status species, and which indicate the presence of suitable, intact habitat, are absent from the site.

In addition to these factors, the site is highly disturbed. The plant species that occur there are tolerant of, or favored by, frequent disturbance such as mowing or cultivation. These species are robust, fast-growing annuals which out-compete native plants. The dense growth of this non-native herbaceous vegetation on the site precludes the occurrence of special-status plants.

Special-status Animal Species

On February 8 and April 28, 2006, wildlife ecologists Mary Orland and Dave Johnston, respectively, conducted reconnaissance-level field surveys for special-status animal species on the site. The survey method involved hiking the entire study area, focusing on areas that may provide habitat for special-status species. The CNDDDB was used as a guide in determining special-status wildlife species potentially occurring on the site.

The special-status animal species that occur in the vicinity in habitats similar to those found on the site are described below. The legal status and likelihood of occurrence of these species are given in Table 2.

Locally occurring species that would be out of their known range at the site, for which habitat at the site is not suitable, or for which the lack of recent records in the site vicinity indicates absence include the California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana aurora draytonii*), foothill yellow-legged frog (*Rana boylei*), western pond turtle (*Emys marmorata*), San Francisco garter snake (*Thamnophis sirtalis tetrataenia*), White-tailed Kite (*Elanus leucurus*), Northern Harrier (*Circus cyaneus*), Golden Eagle (*Aquila chrysaetos*), Prairie Falcon (*Falco mexicanus*), American Peregrine Falcon (*Falco peregrinus anatum*), Burrowing Owl (*Athene cunicularia*), Loggerhead Shrike (*Lanius ludovicianus*), California Horned Lark (*Eremophila alpestris actia*), and Townsend's big-eared bat (*Corynorhinus townsendii*). The steelhead rainbout trout (*Oncorhynchus mykiss*) and California red-legged frog (*Rana aurora draytonii*) are also not expected to occur on the site, as discussed in greater detail below.

Several special-status species may occur on the site rarely or only as occasional foragers, but are not expected to breed on the site, and would not be affected by project implementation. These species include the Willow Flycatcher (*Empidonax traillii*), Merlin (*Falco columbarius*), Sharp-shinned Hawk (*Accipiter striatus*), Vaux's Swift (*Chaetura vauxi*), California Yellow Warbler (*Dendroica petechia brewsteri*), San Francisco dusky-footed wood rat (*Neotoma fuscipes annectens*), and pallid bat (*Antrozous pallidus*).

The large trees on the site could potentially provide nest sites for the Cooper's Hawk (*Accipiter cooperii*), a California Department of Fish and Game (CDFG) Species of Special Concern, and the CNDDDB reports a sighting of this species approximately one mile northeast of the site.

Table 2. Special-status Animal Species, Their Status, and Potential Occurrence.

NAME	*STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
Federal or State Endangered or Threatened Species			
California Red-legged Frog (<i>Rana aurora draytonii</i>)	FT, SP, CSSC	Streams, freshwater pools and ponds with overhanging vegetation.	No breeding habitat; marginal dispersal/foraging habitat. No records for this watershed, presumed absent.
Steelhead (<i>Oncorhynchus mykiss</i>)	FT (Central Calif. Coast ESU)	An anadromous form of rainbow trout that migrates upstream from the Pacific or the S. F. Bay to spawn. Prefers streams with dense canopy and pools with cold water temperatures.	Suitable in-stream pool habitat not present. Fisheries studies have document steelhead as absent from all of Calabazas Creek; presumed absent.
Willow Flycatcher (<i>Empidonax traillii</i>)	SE FE (<i>extimus</i>)	Breeds in riparian habitats in mountains and southern deserts.	Uncommon migrant; does not breed in region.
American Peregrine Falcon (<i>Falco peregrinus anatum</i>)	SE	Breeds on cliffs, forages in virtually any habitat.	No breeding or foraging habitat present; presumed absent.
California Tiger Salamander (<i>Ambystoma californiense</i>)	FT, CSSC	Vernal or temporary pools in annual grasslands, or open stages of woodlands.	No suitable habitat; presumed absent.
California Species of Special Concern			
Foothill Yellow-legged Frog (<i>Rana boylei</i>)	CSSC	Rocky streams in a variety of habitats. Found in coast ranges.	Suitable habitat does not occur on site; considered extirpated from floor of Santa Clara Valley; presumed absent.
Western Pond Turtle (<i>Clemmys marmorata</i>)	CSSC	Permanent or nearly permanent water in a variety of habitats.	Marginal habitat occurs on site. No recent records, presumed absent.
Golden Eagle (<i>Aquila chrysaetos</i>)	CSSC, SP	Breeds on cliffs or in large trees or electrical towers, forages in open areas.	No breeding or foraging habitat present; presumed absent.
Sharp-shinned Hawk (<i>Accipiter striatus</i>)	CSSC	Nests in woodlands, forages in many habitats in winter and migration.	Potential migrant and winter visitor; does not breed on site.
Cooper's Hawk (<i>Accipiter cooperii</i>)	CSSC	Nests in woodlands, forages in many habitats in winter and migration.	Suitable breeding and foraging habitat on site.
Merlin (<i>Falco columbarius</i>)	CSSC	Uses many habitats in winter and migration.	Occasional visitor during migration and winter.
Prairie Falcon (<i>Falco mexicanus</i>)	CSSC	Breeds on cliffs or in large trees or structures, forages in open habitats.	No breeding or foraging habitat present; presumed absent.
Northern Harrier (<i>Circus cyaneus</i>)	CSSC	Forages in marshes, grasslands, and ruderal habitats; nests in extensive marshes and wet fields.	No breeding or foraging habitat on site, presumed absent.
Burrowing Owl (<i>Athene cunicularia</i>)	CSSC	Grasslands and ruderal habitats.	Marginal habitat present; no records for the area, presumed absent.
Loggerhead Shrike (<i>Lanius ludovicianus</i>)	CSSC	Nests in tall shrubs and dense trees, forages in grasslands, marshes, and ruderal habitats.	Marginal breeding and foraging habitat on site. Not expected because of the disturbance and isolation and small area of potential habitat.
California Yellow Warbler (<i>Dendroica petechia brewsteri</i>)	CSSC	Breeds in riparian woodlands, particularly those dominated by willows and cottonwoods.	Breeding is not expected on the site. Marginal habitat is present but riparian habitat on-site does not appear developed enough for this species to breed regularly. Expected as occasional visitor.
California Horned lark (<i>Eremophila alpestris actia</i>)	CSSC	Short-grass prairie, annual grasslands, coastal plains, and open fields.	No suitable breeding or foraging habitat. Short grass area on the site is too small and isolated to support this species. Presumed absent.
Vaux's Swift (<i>Chaetura vauxi</i>)	CSSC	Nests in snags in coastal coniferous forests or, occasionally, in chimneys; forages aerially.	Occasional migrant, forages over the site.

NAME	*STATUS	HABITAT	POTENTIAL FOR OCCURRENCE ON SITE
Townsend's Big-eared Bat (<i>Corynorhinus townsendii</i>)	CSSC	Roosts in caves and mine tunnels in a variety of habitats.	This species is considered mostly extirpated from Santa Clara Valley Floor and the site is too disturbed to support a maternity colony. No evidence of roosting bats was observed on the site and no recent records of nearby colonies. Presumed absent.
Pallid Bat (<i>Antrozous pallidus</i>)	CSSC	Forages over many habitats; roosts in buildings, rocky outcrops and rocky crevices in mines and caves.	This species is considered mostly extirpated from Santa Clara Valley Floor and the site is too disturbed to support a maternity colony. No evidence of roosting bats was observed on the site but this species may occasionally forage on the site.
San Francisco Dusky-footed Woodrat (<i>Neotoma fuscipes annectens</i>)	CSSC	Found in a variety of woodland and brushland habitats and is association with hardwoods.	Potential breeding and foraging habitat occurs on site. However, this species is not expected because of the presence of house cats which usually eliminate woodrat populations. No woodrat nests were observed on the site, but this species may occasionally forage on the site.
State Protected Species or CNPS Species			
White-tailed Kite (<i>Elanus leucurus</i>)	SP	Nests in tall shrubs and trees, forages in grasslands, marshes, and ruderal habitats.	Habitat on the site is too isolated and disturbed. Additionally, the foraging habitat on site and in the area is too small to support breeding; presumed absent.

SPECIAL STATUS SPECIES CODE DESIGNATIONS

FE = Federally listed Endangered
FT = Federally listed Threatened
SE = State listed Endangered
CSSC = California Species of Special Concern
SP = State Protected Species

Expanded discussions are provided below for this species, and for other species for which the resource agencies have expressed particular concern in the general vicinity of the site.

Steelhead Rainbow Trout (*Oncorhynchus mykiss*). Federal Listing Status: Threatened; State Listing Status: Species of Special Concern. The steelhead rainbow trout is an anadromous form of rainbow trout that migrates upstream from the ocean and bay to spawn. Steelhead usually migrate upstream to spawning areas in late fall or early winter, when flows are sufficient to allow them to reach suitable habitat in far upstream areas that may have little water at other times of the year. Spawning occurs between December and June. Steelhead eggs remain in gravel depressions that are known as redds for one and one-half to four months before hatching.

Calabazas Creek is channelized both immediately upstream and downstream from the site, and lacks the pools needed by juvenile steelhead as over-summering sites. Therefore, local stream conditions are not suitable for supporting this species. This reach of Calabazas Creek is not within designated Critical Habitat for the species (NMFS 2005). Steelhead have been documented as absent from all of Calabazas Creek (Leidy et al. 2005), and therefore this species is not expected to be found on the site.

California Red-legged Frog (*Rana aurora draytonii*). The California red-legged frog is a member of the family Ranidae within the order Anura, and is one of two subspecies of the red-legged frog (*Rana aurora*) (USFWS 2000). The California red-legged frog is the largest native frog in the western United States. Juvenile frogs have the same coloration as adults except that the dorsolateral folds are normally yellow or orange colored instead of red, especially in very young individuals.

California red-legged frog is not known to occur in Calabazas Creek, and the CNDDDB query shows that the nearest red-legged frog sightings are three miles to the south in Saratoga Creek, a separate watershed. The extensive development between the known occurrence in the Saratoga Creek watershed and the site preclude dispersal of red-legged frogs between areas of known occurrence and the site. In addition, the lack of deep plunge pools and emergent vegetation in this reach of Calabazas Creek indicates that this reach of Calabazas Creek cannot support a population of California red-legged frogs. Therefore, this species is not expected to occur on the project site.

Cooper's Hawk (*Accipiter cooperii*). Federal Listing Status: None; State Listing Status: Species of Special Concern. The Cooper's Hawk is a large accipiter that can prey upon medium-sized birds (e.g., jays, doves, and quail) and occasionally takes small mammals and reptiles. The Cooper's Hawk prefers landscapes where wooded areas occur in patches and groves which facilitates the ambush hunting tactics employed by this species. Breeding pairs in California prefer nest sites within dense stands of live oak woodland or riparian areas and prey heavily on young birds during the nesting season. This species is expected to occur at least occasionally on the site and may breed on, or adjacent to, the site. However, the site is small enough that at most, one nesting pair of this species could be disturbed by project activities.

Pallid Bat (*Antrozous pallidus*). Federal Listing Status: None; State Listing Status: Species of Special Concern. Pallid bats are pale to light brown in color, and, at about 24 grams,

the Pacific race is one of the state's largest bats. Coastal colonies commonly roost in deep crevices in rocky outcroppings, in buildings, under bridges, and in hollow trees. Colonies can range from a few individuals to over a hundred and are non-migratory. Some female/young colonies (typically the coastal subspecies) use their day roost for their nursery as well as hibernacula. Although crevices are important for day roosts, night roosts often include porches, garages, barns, and highway bridges. Pallid bats may travel up to several miles for water or foraging sites if roosting sites are limited. This bat prefers foraging on terrestrial arthropods in dry open grasslands near water and rocky outcroppings or old structures. They may also occur in oak woodlands and at the edge of redwood forests along the coast. Pallid bats are sensitive to human disturbances at roost sites.

Pallid bats are known to occupy buildings with degraded eaves, such as the main residence on the site, and a pallid bat maternity colony occurs in the Saratoga foothills within five miles of the site. However, no signs of bats were observed on the site and the lack of a large enough foraging area in the near vicinity makes it unlikely that pallid bats occupy this structure. The area surrounding the site is urbanized, and this species has been extirpated from the floor of Santa Clara Valley. Therefore, this species may occasionally forage on-site, but it is not expected to roost, or form a maternity colony, on the site.

San Francisco Dusky-footed Woodrat (*Neotoma fuscipes annectens*). **Federal Listing Status: None; State Listing Status: Species of Special Concern.** This species prefers hardwood forests and brushlands and often forages above ground. Food includes berries, fungi, leaves, flowers, and nuts. No nests of the San Francisco dusky-footed woodrat were observed on site although potential habitat occurs in the coast live oak riparian woodland. This species is sensitive to urban development and is usually extirpated from such areas as a result of non-native predators, such as feral cats. Because of the high numbers of cats observed on the site and the lack of any woodrat nests, this species is not expected to occur on the site.

IDENTIFICATION OF REGULATED HABITATS

United States Army Corps of Engineers Jurisdiction

Survey Results. No wetland or aquatic habitat subject to the regulatory jurisdiction of the United States Army Corps of Engineers (USACE) occurs on the site. Calabazas Creek, an intermittent tributary to Guadalupe Slough and the San Francisco Bay, occurs adjacent to site. Any activities that would result in the placement of fill (such as installation of stormwater outfall structures) below the creek's ordinary high water mark would require a permit from the USACE. No such activities are proposed by the project.

California Department of Fish and Game Jurisdiction

Survey Results. The limit of CDFG jurisdiction is typically the topographic top of bank or the lateral limit of riparian canopy, whichever is greatest. The edge of CDFG jurisdiction on-site corresponds to the outer edge of the riparian canopy (Figure 2). Appendix A provides an overview of regulations related to CDFG jurisdiction.

IMPACTS AND MITIGATION

The proposed residential development project will have a number of effects on the biological resources of the site. The California Environmental Quality Act (CEQA) and the CEQA Guidelines provide guidance in evaluating project impacts and determining which impacts will be significant (Remy et al. 1999). CEQA defines “significant effect on the environment” as “a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” Under CEQA Guidelines section 15065 (Mandatory Findings of Significance), a project’s effects on biotic resources are deemed significant where the project would:

- “substantially reduce the habitat of a fish or wildlife species”
- “cause a fish or wildlife population to drop below self-sustaining levels”
- “threaten to eliminate a plant or animal community”
- “reduce the number or restrict the range of an endangered, threatened, or rare species”

In addition to the section 15065 criteria that trigger mandatory findings of significance, Appendix G of the CEQA Guidelines provides a checklist of other potential impacts to consider when analyzing the significance of project effects. The impacts listed in Appendix G may or may not be significant, depending on the level of the impact. For biological resources, these impacts include whether the project would:

- “have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service”
- “have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service”
- “have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means”
- “interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites”
- “conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance”
- “conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.”

Two general assumptions are employed to establish the thresholds of significance for impacts to the site's biotic resources. These assumptions are as follows:

1. Direct impacts to wildlife species are assumed to be correlated with the loss of plant communities that provide their primary habitat. These losses would result from site excavation, road building, grading, filling or other damage to habitats. The conversion of these communities to residential buildings, parking areas, and infrastructure, therefore, may result in the loss of or reduction of use for some wildlife species. The existing wildlife species are usually eliminated or replaced with a suite of species that tolerate these development activities.
2. Indirect impacts to wildlife could also occur. If remaining fragments of undeveloped habitat are isolated from larger areas of contiguous habitat, the remaining habitats are expected to have lower biological values than those prevailing before development.

In addition, the impact analysis is based on the following assumptions from our understanding of the proposed project:

1. The project will not result in the loss of mixed riparian forest on-site.
2. The actual riparian setback is an average of 30 feet from the edge of the riparian corridor.
3. Coast live oak riparian forest will be restored within an approximately 30-foot wide band between the proposed development and the existing riparian habitat.
4. The large-diameter oaks and cedars along the western and northern perimeters of the property will not be removed.

The following section addresses potential impacts to biotic resources resulting from the proposed project.

IMPACTS FOUND TO BE LESS THAN SIGNIFICANT

Development Encroachment into Recommended Riparian Corridor Setback

The placement of development in close proximity to riparian corridors (referred to herein as "encroachment") can adversely affect wildlife use and water quality within riparian corridors due to factors such as increased human activity, night lighting, and storm water runoff. Therefore, the following section assesses the encroachment impact of the proposed development on the adjacent riparian corridor. The City of San Jose's Riparian Corridor Policy Study (RCPS) provides guidelines for minimum riparian setback distances depending on the quality of riparian habitat and the intended land use (The Habitat Restoration Group and Jones and Stokes Associates Inc. 1999). The RCPS recommends a riparian setback of 100 feet for development projects; measured from the top-of-bank or edge of riparian canopy, whichever is greater. These guidelines provide for the consideration of exceptions to the 100-foot setback, as long as basic riparian habitat protection objectives are achieved. The project will achieve the basic riparian

habitat protection objectives listed in the RCPS for habitat value, channel erosion, and water quality. The development would not exacerbate channel erosion or further degrade water quality since it is located an average of 30-feet from the edge of riparian canopy/top-of-bank on relatively flat ground and incorporates measures to protect the quality of receiving waters. These measures include standard erosion control Best Management Practices, a storm water filtration unit, and oversized underground pipes to detain storm water on-site thereby maintaining pre-development storm water discharge rates to the existing storm drain system. Storm water will be routed to the existing storm drain system along Duckett Way and no new storm water outfalls will be constructed. The project's impact on habitat values is discussed below. The proposed project meets the following exceptions to the 100-foot riparian setback listed in the RCPS:

- *“Urban infill locations where most properties are already developed and parcels are generally small.”* The site is located within an urbanized area of San Jose and is 1.82 acres in size.
- *“Instances where implementation of the project includes measures which can protect and enhance the riparian value of the corridor more than could a 100-foot setback.”* The project includes restoration of approximately 8,332 sq. ft. of riparian habitat within the setback by converting existing buildings, hardscape and non-native tree canopy to native coast live oak riparian forest.

Although closed-canopy mixed riparian forest occurs adjacent to the proposed project, the riparian habitat on and adjacent to the site is degraded by existing development. English ivy, an invasive, non-native groundcover dominates the understory and out-compete native shrub and tree seedlings. Silver wattle, an exotic tree species that can invade and degrade riparian habitat, is present at the downstream end of the site. The riparian habitat quality on-site is further degraded by existing hardscape and structures, which abut the riparian corridor along 50% of the project reach. Furthermore, up and downstream of the site, riparian habitat quality abruptly diminishes; a ruderal field and commercial development occur immediately south (upstream) of the site, and State Route 85 is approximately 300 feet downstream. The closest intact riparian habitat is located approximately 2,000 feet upstream of the site. On a larger scale, the riparian woodland on site is a very small habitat island surrounded by dense development.

Such riparian habitat remnants are valuable aesthetic resources, and provide some functions and values for water quality and aquatic life. However, they are not of sufficient size or quality to support wildlife typically associated with intact riparian habitat. Furthermore, because developed areas occur immediately up- and downstream of the site, the riparian habitat is not currently acting as a wildlife corridor. Rather, common, urban-adapted wildlife species utilize the riparian habitat on-site, such as the raccoon, Mallard, and Pacific tree frog. Therefore, a recommended setback of 75 feet is warranted along the riparian corridor and would be sufficient to protect the biological resources of the riparian corridor from significant impacts associated with the proposed project. The actual setback for the proposed project is an average of 30 feet from the riparian corridor (Figure 4). Below we utilize the recommended 75-foot riparian setback as a threshold of significance for evaluating riparian encroachment impacts. Riparian mitigation would be warranted if the proposed project were to increase the amount of development within the recommended 75-foot riparian setback above the existing condition.

There is approximately 7,401 square feet of existing development encroachment (buildings and hardscape) within the 75-foot riparian setback. The proposed encroachment of new development within the 75-foot setback is approximately 8,643 square feet, resulting in a net increase of 1,242 square feet of encroachment (Figure 4). The net increase in development encroachment constitutes a significant impact and should be mitigated at a ratio of 0.5:1 (riparian mitigation surface area: net increase in encroachment surface area) by the restoration of at least 621 sq. ft. of riparian habitat. The project has incorporated the restoration of approximately 8,332 sq. ft. of riparian habitat within the riparian setback, which will result in a net benefit to riparian habitat and associated wildlife species (Figure 4). Therefore, the impact of the proposed encroachment is less-than-significant.

In addition, the proposed project includes passive recreation within the recommended 75-foot setback. Passive recreation within the recommended setback would be limited to a small percentage of the setback area (~15 percent) and would not occur within the riparian restoration area. It would include installation of benches and spur trails for walking and sitting. Such limited passive recreation would constitute a less-than-significant impact on the biotic resources of the riparian corridor.

IMPACTS OF INCREASED NIGHT LIGHTING ON NOCTURNAL RIPARIAN ASSOCIATED WILDLIFE

Lighting associated with the proposed homes, streets and additional cars will increase the amount of artificial light that is cast onto the existing riparian habitat during the night. This effect will be reduced by the following measures, which have been incorporated into the project: orienting street lights away from the riparian corridor and restoration of riparian habitat between the development and the existing riparian corridor. Nonetheless, additional night lighting could potentially increase predation of some wildlife species (e.g., birds' nests, herps) by nocturnal predators, and could potentially reduce habitat quality for some wildlife species, especially species that are more sensitive to human disturbance. However, few such sensitive species are expected to be present within the riparian corridor under current conditions. Most nocturnal species expected to use the riparian habitat are common species such as striped skunks, raccoons, opossums, and non-native rats, and lighting is not expected to adversely affect these species. Therefore, in our opinion, this impact is less-than-significant because the existing urban surroundings of the site limit its value to sensitive wildlife species.

LOSS OF RIPARIAN HABITAT

No construction is proposed within the riparian corridor. However, the project does include the removal of two dead redwood trees and two stumps located within the riparian corridor for safety purposes (Arbor Resources 2006). The dead redwoods and stumps do not provide habitat for special-status wildlife species and furthermore do not provide substantial cavities for use by common wildlife species. Therefore, the impact of removal of the two dead redwood trees and stumps is less-than-significant.

IMPACTS TO NON-NATIVE HERBACEOUS HABITAT/ORCHARD TREES

According to preliminary site plans (Figure 4), 1.34 acres of non-native herbaceous habitat, including up to 20 fruit and nut trees, will be impacted by the project. This type of habitat is common locally and regionally and does not provide unique or limited resources for wildlife. Impacts to non-native herbaceous habitat/orchard trees are therefore not considered significant.

IMPACTS TO NESTING COOPER'S HAWKS

The Cooper's Hawk, a California Species of Special Concern, may breed on the site. However, the site represents only a tiny fraction of suitable habitat for this suburban-adapted species regionally, and only one pair (if any) would potentially be affected by the project. The species

Figure 4. Riparian Setback Encroachment and Restoration

is, therefore, not expected to suffer population-level consequences from the proposed development. Thus, project impacts to this species are not considered significant.

SIGNIFICANT IMPACTS THAT CAN BE MITIGATED TO A LESS-THAN-SIGNIFICANT LEVEL

Impacts to Maternity Roosts of Bats

Reconnaissance-level surveys suggest that bats do not currently roost in the on-site buildings. However, no focused surveys for bats were conducted, and even if bats are not currently present on-site, they could occupy these buildings at a later date. Although it is unlikely that pallid bats would roost in the on-site buildings, other species of bats, such as the Yuma myotis or big brown bat, which are more adapted to suburban situations, could potentially roost in these buildings. These latter species could use the on-site buildings either as a maternity roost (the term used herein to describe a roost occupied by pregnant females or females with non-flying young) or as a non-breeding roost (the term used herein to describe a day roost that is not currently supporting pregnant females or females with non-flying young). The razing of buildings occupied by roosting bats could result in the direct loss of individuals. For non-special-status species such as the Yuma myotis or big brown bat, the loss of the roost site itself would not be a significant impact due to the abundance of suitable roost sites available elsewhere in the region. Furthermore, the loss of individual bats in a non-breeding roost would not be considered significant in the case of this project; potentially occurring species are regionally abundant, and the number of bats that could potentially be impacted represents only a fraction of the regional population (however, see “Regulatory Overview for Nesting Birds and Non-Game Mammals” below).

However, if buildings contain an active maternity roost when they are demolished, an entire breeding colony could be eliminated due to the loss of pregnant females or females with non-flying young. The loss of an active maternity roost, even of relatively common species of bats such as Yuma myotis and big brown bat, would therefore be a potentially significant impact. Implementation of Mitigation 1, and Mitigation 2 if warranted, would reduce this potential impact to a less-than-significant level.

Mitigation 1. Pre-demolition Surveys and Buffer Zones. A pre-demolition survey for bat maternity roosts should be conducted prior to demolition of the buildings, particularly the main house. The survey should be conducted by a qualified bat biologist (i.e., a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing the biologist to handle and collect bats). No activities that would result in disturbance to active maternity roosts would proceed prior to the completed surveys. If no active maternity roosts are found, then no further action would be required (but see “Regulatory Overview for Nesting Birds and Non-Game Mammals” below). If a maternity roost is present, Mitigation 2 should be implemented.

Mitigation 2. Buffer Zones and Seasonal Avoidance. If a maternity roost is detected, a qualified bat biologist would determine the extent of a construction-free buffer zone that should be maintained around the roost, since bats are known to abandon young when disturbed.

Construction activities within this zone should not occur during the period 1 March through 31 August to avoid potential construction disturbance to the maternity roost. After 31 August, roosting individuals should be safely evicted, under the direction of a qualified bat biologist (as determined by a Memorandum of Understanding with CDFG), by either opening the roosting area to allow air flow through the cavity or using a one-way door to exclude the bats. Construction should then follow no sooner than the following day. This action should allow bats to leave during dark hours, thus increasing their chance of finding new roosts while minimizing the risk of predation, which would be higher during daylight hours.

COMPLIANCE WITH ADDITIONAL LAWS AND REGULATIONS APPLICABLE TO BIOTIC RESOURCES

REGULATORY OVERVIEW FOR NESTING BIRDS AND NON-GAME MAMMALS

The Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA; 16 U.S.C., §703, Supp. I, 1989) prohibits killing, possessing, or trading in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs. Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment, a violation of the MBTA.

California State Fish and Game Code

Migratory birds are also protected in California. The State Fish and Game Code §3503 emulates the MBTA and protects birds' nests and eggs from all forms of take. Disturbance that causes nest abandonment resulting in the loss of eggs or young may be considered "take" by the CDFG. Nesting raptors (birds of prey) are specifically protected under CDFG Code §3503.5.

Bats and other non-game mammals are protected in California. The State Fish and Game Code §4150 states that all non-game mammals or parts thereof may not be taken or possessed except as provided otherwise in the code or in accordance with regulations adopted by the commission. Activities resulting in mortality of non-game mammals (e.g., destruction of an occupied non-breeding bat roost, resulting in the death of bats), or disturbance that causes the loss of a maternity colony of bats (resulting in the death of young), may be considered "take" by the CDFG.

Project Applicability

The vast majority of birds found on the site are protected under the MBTA and state Fish and Game Code. Any bats and other non-game mammals that may occur on the site are also protected by the state Fish and Game Code. Project construction has the potential to take nests, eggs, young, or individuals of protected bird and mammal species. Construction disturbance during the breeding season could result in the incidental loss of fertile bird eggs or nestlings, or the loss of young bats at maternity roosts. Impacts to bat maternity roosts and mitigation measures to avoid such impacts have already been discussed above. To mitigate the risk of impacts to protected birds and to bats' non-breeding roosts, we recommend that the following measures be implemented.

Compliance Measures for Nesting Birds

Measure 1. Avoid Construction during the Nesting Season. Grading and other construction activities should be scheduled to avoid the nesting season to the extent possible. The nesting season for most birds in Santa Clara County extends from January through September.

Measure 2. Pre-construction/Predisturbance Surveys. If construction is to occur during the breeding season, preconstruction surveys should be conducted by a qualified ornithologist no more than 15 days prior to the initiation of construction in any given area. Pre-construction surveys should be used to ensure that no nests of species protected by the MBTA or State Code will be disturbed during project implementation.

Measure 3. Inhibiting Nesting. If vegetation is to be removed by the project and all necessary approvals have been obtained, potential nesting substrate (*e.g.*, bushes, trees, grass, buildings, burrows) that will be removed by the project should be removed in October – December before nesting season to help preclude nesting. Pre-removal surveys are required for some species. Removal of vegetation or structures slated for removal by the project should be completed in October-December outside of the nesting season.

Measure 4. Buffer Zones. If an active nest is found and is greater than half completed, a qualified ornithologist, in consultation with CDFG, will determine the extent of a construction-free buffer zone to be established around the nest.

Compliance Measures for Non-breeding Bat Roosts

It is recommended that a bat specialist possessing a Memorandum of Understanding to handle bats examine any buildings to be demolished to determine whether bats are present (and if present, which species are present and in what numbers), regardless of the time of year (*i.e.*, even if construction is scheduled to avoid the breeding season). Measures to avoid directly harming individual bats, such as evicting them prior to demolition, are recommended whether or not the bats form a maternity roost.

CITY OF SAN JOSE RIPARIAN CORRIDOR POLICY

It is generally desirable to minimize human activities adjacent to riparian habitats since the close proximity of human activity and the placement of structures will adversely affect wildlife use within riparian corridors. Riparian corridor setbacks are the principle means of minimizing impacts associated with human activities. The City of San Jose's riparian corridor policy (The Habitat Restoration Group and Jones and Stokes Associates 1999) provides guidelines for minimum setback depths depending on the quality of riparian habitat and the intended land use. The riparian corridor policy recommends a minimum setback requirement of 100 feet from the edge of the riparian corridor (or top-of-bank, whichever is greater), for all buildings, impervious surfaces, and ornamental landscaped areas. The City also provides setback exceptions for properties located within or near downtown San Jose and for urban infill locations where most properties are already developed and parcels are generally small. The applicability of project to these setback exceptions is discussed above in the Impacts and Mitigation Section.

CITY OF SAN JOSE TREE ORDINANCE

The City of San Jose Tree Ordinance defines an ordinance-sized tree as “any woody perennial plant characterized by having a main stem or trunk which measures 56 inches or more in circumference (18 inches or more in diameter) at a height of 24-inches above natural grade slope”. A number of ordinance size trees occur within the riparian corridor. No impacts are expected to occur within the riparian corridor. The proposed project would result in the removal of two ordinance-sized English walnuts (Arbor Resources 2006). A tree removal permit is required from the City for the removal of any ordinance-sized trees.

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**APPENDIX A.
REGULATORY OVERVIEW**

SPECIAL-STATUS SPECIES REGULATIONS OVERVIEW

Federal and state endangered species legislation gives several plant and animal species known to occur in the vicinity of the site special status. In addition, state resource agencies and professional organizations, whose lists are recognized by agencies when reviewing environmental documents, have identified as sensitive some species occurring in the vicinity of the site. Such species are referred to collectively as “species of special status” and include: plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA), animals listed as “fully protected” under the California Fish and Game Code, animals designated as “Species of Special Concern” by the CDFG, and plants listed as rare or endangered by the CNPS in the *Inventory of Rare and Endangered Plants of California* (2001).

Federal Endangered Species Act provisions protect federally listed threatened and endangered species and their habitats from unlawful take. “Take” under FESA includes activities such as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any of the specifically enumerated conduct.” The U.S. Fish & Wildlife Service’s (USFWS) regulations define harm to mean “an act which actually kills or injures wildlife.” Such an act “may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering” (50 CFR § 17.3). Activities that may result in “take” of individuals are regulated by the USFWS. The USFWS produced an updated list of candidate species September 19, 1997 (USFWS 1997; 50 CFR Part 17). Candidate species are not afforded any legal protection under FESA; however, candidate species typically receive special attention from federal and state agencies during the environmental review process.

Provisions of CESA protect state-listed threatened and endangered species. CDFG regulates activities that may result in “take” of individuals (*i.e.*, “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”). Habitat degradation or modification is not expressly included in the definition of “take” under the California Fish and Game Code. The CDFG, however, has interpreted “take” to include the “killing of a member of a species which is the proximate result of habitat modification” Additionally, the California Fish and Game Code contains lists of vertebrate species designated as “fully protected” (California Fish & Game Code §§ 3511 [birds], 4700 [mammals], 5050 [reptiles and amphibians], 5515 [fish]). Such species may not be taken or possessed without a permit.

The CDFG has also produced three lists (amphibians and reptiles, birds, and mammals) of “species of special concern” that serve as “watch lists.” Species on these lists either are of limited distribution or the extent of their habitats has been reduced substantially, such that threat to their populations may be imminent. Thus, their populations should be monitored. They may receive special attention during environmental review.

Plants listed as rare or endangered by the CNPS (2001), but which have no designated status under state endangered species legislation, are defined as follows:

- List 1A. Plants considered by the CNPS to be extinct in California.
- List 1B. Plants rare, threatened, or endangered in California and elsewhere.
- List 2. Plants rare, threatened, or endangered in California, but more numerous elsewhere.
- List 3. Plants about which we need more information - A review list.
- List 4. Plants of limited distribution - A watch list.

CALIFORNIA DEPARTMENT OF FISH AND GAME JURISDICTION

The CDFG potentially extends the definition of stream to include “intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, blue-line streams (USGS), and watercourses with subsurface flows. Canals, aqueducts, irrigation ditches, and other means of water conveyance can also be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife” (CDFG 1994). Such areas on the site were determined using methodology described in *A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607* (CDFG 1994).

Activities that result in the diversion or obstruction of the natural flow of a stream, or which substantially change its bed, channel or bank, or which utilize any materials (including vegetation) from the streambed, may require that the project applicant enter into a Streambed Alteration Agreement with the CDFG.

The banks of Calabazas Creek and the associated riparian habitat on-site are potentially within CDFG jurisdiction. A streambed alteration agreement from the CDFG may be required for project activities within CDFG jurisdiction, such as the proposed removal of the 2 dead redwoods, the 2 stumps and the English ivy.

**APPENDIX B.
SPECIAL-STATUS PLANT SPECIES
CONSIDERED BUT REJECTED FOR OCCURRENCE**

Appendix B. Special-status Plant Species Considered but Rejected for Occurrence on the Oak Grove Garden Townhomes Site.

Scientific Name	Common Name	Lack of Strongly Alkaline Soils	Lack of Vernal Pool or Mesic Habitat	Lack of Serpentine Soils	Other Edaphic Factors Absent from The Site	Associated Species Absent from the Site
<i>Allium peninsulare</i> var. <i>franciscanum</i>	Franciscan onion			X	X	
<i>Amsinckia lunaris</i>	bent-flowered fiddleneck					X
<i>Androsace elongata</i> ssp. <i>acuta</i>	California androsace				X	X
<i>Balsamorhiza macrolepis</i> var. <i>macrolepis</i>	big-scale balsamroot				X	
<i>Calochortus umbellatus</i>	Oakland star-tulip			X		
<i>Castilleja affinis</i> ssp. <i>neglecta</i>	Tiburon Indian paintbrush			X		
<i>Ceanothus ferrisiae</i>	coyote ceanothus			X		
<i>Centromadia parryi</i> ssp. <i>congdonii</i>	Congdon's tarplant	X				
<i>Cirsium fontinale</i> var. <i>campylon</i>	Mt. Hamilton thistle			X		
<i>Dudleya setchellii</i>	Santa Clara Valley dudleya			X		
<i>Dirca occidentalis</i>	Western leatherwood				X	X
<i>Eriogonum luteolum</i> var. <i>caninum</i>	Tiburon buckwheat			X		
<i>Erysimum franciscanum</i>	San Francisco wallflower			X		
<i>Fritillaria agrestis</i>	stinkbells				X	
<i>Fritillaria liliacea</i>	fragrant fritillary			X		
<i>Hoita strobilina</i>	Loma Prieta hoita				X	X
<i>Leptosiphon ambiguous</i>	serpentine linanthus			X		
<i>Leptosiphon grandiflorus</i>	large-flowered linanthus					X
<i>Lessingia hololeuca</i>	woolly-headed lessingia			X		
<i>Micropus amphibolus</i>	Mt. Diablo cottonweed				X	X
<i>Monardella villosa</i> ssp. <i>globosa</i>	robust monardella					X
<i>Navarretia cotulifolia</i>	cotula navarretia	X				X
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner's yampah		X		X	
<i>Plagiobothrys uncinatus</i>	hooked popcorn-flower		X		X	
<i>Ranunculus lobbii</i>	Lobb's aquatic buttercup		X		X	
<i>Sanicula saxatilis</i>	rock sanicle				X	
<i>Streptanthus albidus</i> ssp. <i>albidus</i>	Metcalf Canyon jewel-flower			X		
<i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	most beautiful jewel-flower			X		
<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	saline clover	X				X